

M 6.3, 1 km SSW of Calatagan, Philippines

Origin Time: 2020-12-24 23:43:42 UTC (Fri 07:43:42 local)

Location: 13.8178° N 120.6238° E Depth: 109.0 km

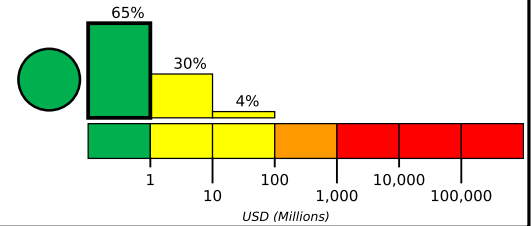
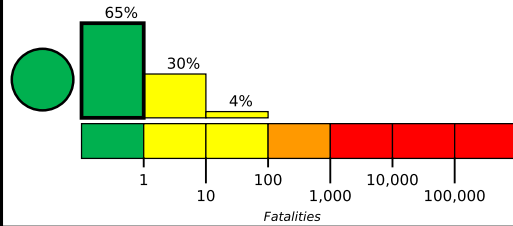
FOR TSUNAMI INFORMATION, SEE: tsunami.gov

Created: 2 hours, 4 minutes after earthquake

Estimated Fatalities

Green alert for shaking-related fatalities and economic losses. There is a low likelihood of casualties and damage.

Estimated Economic Losses

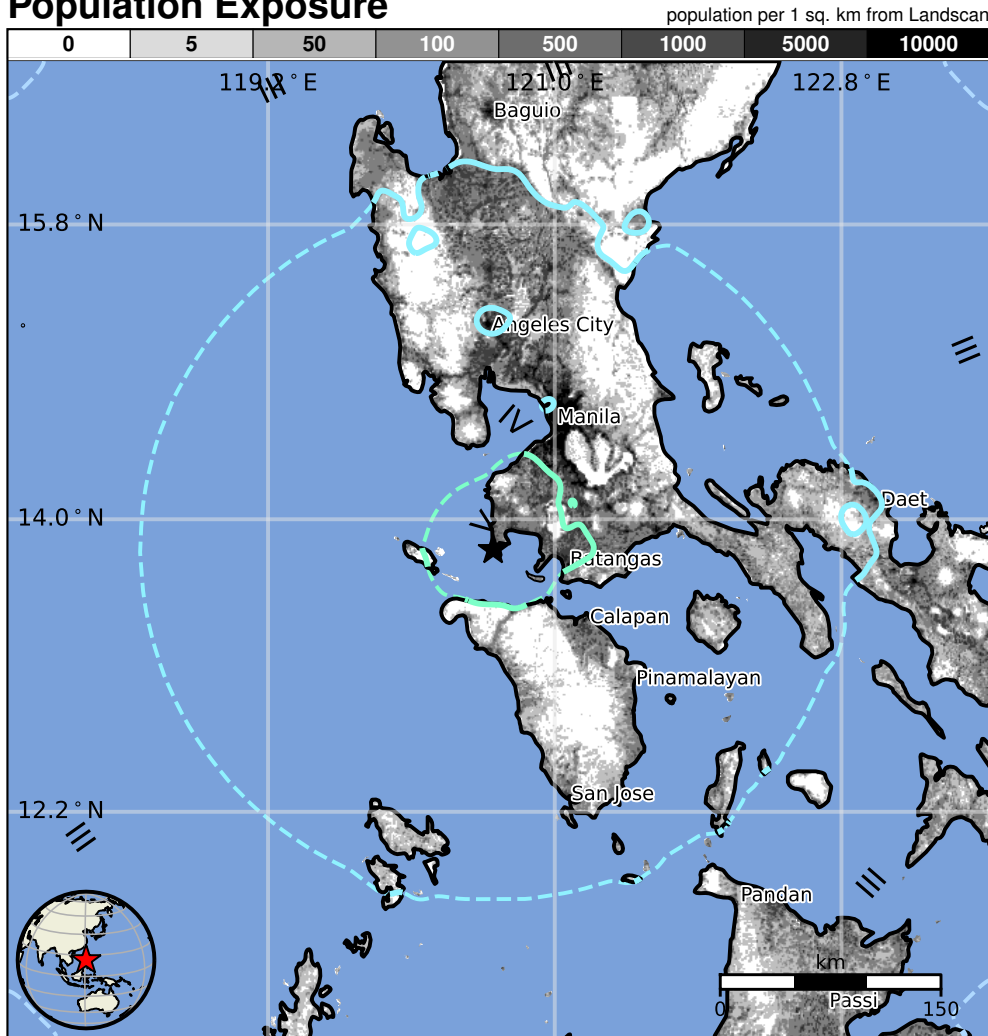


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)	—*	12,635k*	40,465k	3,775k	12k	0	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are a mix of vulnerable and earthquake resistant construction. The predominant vulnerable building types are unknown/miscellaneous types and heavy wood frame construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1977-03-18	370	7.2	VII(520k)	1
1999-12-11	234	7.2	VIII(17k)	1
1990-07-16	220	7.7	IX(893k)	2k

Recent earthquakes in this area have caused secondary hazards such as landslides and liquefaction that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
VI	Calatagan	16k
VI	Balitoc	3k
V	Gulod	3k
V	Lucuhin	4k
V	Sabang	3k
V	Biga	3k
IV	Calamba	317k
IV	Manila	1,600k
IV	San Fernando	251k
III	Baguio	273k
III	San Fernando	83k

PAGER content is automatically generated, and only considers losses due to structural damage.

Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/us6000d2ra#pager>

bold cities appear on map.

(k = x1000)

Event ID: us6000d2ra